

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 18, line 11, with the following rewritten paragraph:

1 A decision-feedback equalizer scheme is used to cancel the channel inter-
2 symbol interference interface (ISI) from, for example, spectrum nulls that can
3 locate inside the 4 - 10 MHz transmission band due to the multiple reflections
4 from any unterminated stubs. In the 10M8 specification, 2 and 4Mbauds are
5 specified for different channel conditions. For one particular receiving frame, the
6 baud rate of the pay-load is not known until the pay-load encoding (PE) field is
7 received. Therefore, two equalizers designed to work at 2 and 4Mbauds have to
8 be trained (432) before the PE field is received. The equalizers include a
9 fractional spaced feed forward equalizer (FSE) 430 operating at 8 MHz and a
10 symbol rate based decision feedback equalizer (DFE) 428 operating at 4 or 2
11 MHz. The PE determines whether the DFE 428 operates at 2 or 4 MHz and the
12 FSE 430 is downconverted to 2 or 4 MHz (434) based on the same results. Both
13 FSE 430 and DFE 428 are complex filters. In some embodiments, the length of
14 the FSE is chosen as $K=14$ (number of taps), and the length of the DFE is
15 chosen as $L=20$ (number of taps) for 4Mbaud symbol rate and $L=10$ for 2Mbaud
16 symbol rate.